

# **SYNCHRONOUS UPDATING OF DYNAMIC INTERACTIVE APPLICATIONS**

## **ABSTRACT OF THE DISCLOSURE**

An automation server interfaces with broadcast scheduling systems of various types to  
5 automatically synchronize the behavior of interactive applications relative to various broadcast  
programs, such as television shows and commercials, so as to maintain the appropriate  
interactive application for whatever broadcast program is airing. This allows for television  
shows which have an associated interactive application, but which are segmented by  
commercials (which may have their own interactive applications) to have their interactive  
10 application displayed while the television show is on, but not during commercials, while  
maintaining any state information that has been created during execution of the interactive  
application. The automation server includes multiple channel interfaces, each having a translator  
and an event manager. The translator translates native control signals from the scheduling  
15 system into a fixed set of atomic commands which represent the lifecycle behavior of a broadcast  
program. The event manager receives these atomic commands and uses them to determine the  
appropriate state for any interactive application that is associated with the broadcast program.  
The event manager transmits commands to a broadcast server which directly manages the  
20 interactive applications by transmitting code, data, and commands to broadcast receivers that  
controls the execution of the interactive applications in response to the event manager's  
commands.